H. also attempts to localize the superior and inferior part of the visual field. M. Monakow says there is no projection from the eye into the cerebral cortex; a new centre can form of itself if the pheripheral cortical centre is destroyed; the centre then is mobile. In support of this theory analogies exist in the motor and sensory centres. H. meets this theory by asserting that hemianopsia caused by a cortical lesion in the calcarine fissure is not transitory, and claims this is supported by his own case and those of Hun, Déjerine and Wildbrand. H. does not think Monakow's case, which he comments on in detail, upsets in any way his conclusions. ELLIOTT.

Experimental Researches on the Fatigue of the Human Muscles Caused by the Action of the "Nerve Poisons."—C. Rossi. (*Rivisto Sperimentale di Freniatria*, 1894, fasc. iii., iv., page 442.) The experiments were made upon the author himself and his laboratory servant The muscles experimented upon were the flexor digiti medii of both hands. The researches were made in the following manner: A weight, which was uniform for all experiments, was raised (and lowered) every two seconds until the muscle was so tired that the weight could not be raised any more. Every elevation was marked on the "ergograph" of Mosso. Ten minutes after the starting of the first series of muscular contractions another series was started; ten minutes later a third, etc. The experiments were thus conducted during one hour, making seven series for each hand.

The following day repetition of the experiments in the same manner under the influence of the drug, which was taken by mouth or by hypodermatic injection directly before the beginning of the experimenting. In some cases, where the author desired to study the later effects of the drug, the sessions were prolonged to two hours or more.

As criterions served:

1. The mechanical labor performed (sum of single elevations and weight) (*a*) in each single series, (*b*) during a whole session.

2. The number of muscular contractions in one single series. The results attained were:

I. Alcohol, absinthe, caffeine, ether and strychnia increase the resistance to fatigue.

a. Alcohol: Given in a considerable dose (80 grammes of rum), it first increases the resistance to fatigue, but soon (within half an hour) diminishes it. In small doses (25 grammes of rum) it increases the resistance to fatigue, which increase remains stationary as long as one is under the influence of the drug.

b. Absinthe: First highly increases the resistance to fatigue, an effect which lasts only from twenty to thirty minutes, and which gives place to a rapid diminishment. The absinthe acts as a temporary excitant.

c. Caffeine: It increases both the number of contractions in a single series, and the quantity of the total mechanical labor performed. This effect remains stationary as long as the drug acts; it is not followed by a diminishment of the resistance to fatigue. Caffeine must, therefore, be considered as a tonic for the neuro-muscular system.

Camphor: It displays a variety of action; in one person it increases the resistance to fatigue; in others it diminishes it. Its effect will always depend with the dose and the individual.

Strychnia: Increases the resistance to fatigue, which manifests itself not only by the increase of the later mechanical labor, but also by the increased number of single contractions.

II. Atropine and hyoscyamine do not influence the resistance to fatigue in any manner.

III. Bromide of potash, chloral hydrate, duboisine, morphine and opium have a depressing effect, diminishing the resistance to fatigue.

a. Bromide of potash: The depressing effect is of short duration, the neuro-muscular activity very soon revives to return to the normal.

b. Chloral hydrate: The depressing effect is stronger and lasts much longer than that of bromide of potash. Both the later mechanical labor and the number of muscular contractions are diminished.

c. Duboisine: Acts similarly to chloral hydrate. The diminution of the mechanical labar is very intense.

d. Morphine and opium: The resistance to fatigue is diminished in a high degree. This diminishment is most pronounced at the beginning of the experiment series. ONUF.

ANATOMICAL.

A Finding of Anthropological Significance in the Negro Brain.—Waldeyer (*Sitzungs Berichte der konig. Preuss ak. d. Wissensch. zu Berlin*, 1894, *Neurolog. Centrb.*, Feb. 15, 1895).

The author, after careful study of the Negro brain, comes to the following conclusions: The Sylvian fissure is characterized by its remarkable shortness. The steep ascent of the posterior end of this fissure which has been described by some authors, was not found constantly. The *pars opercularis* appeared frequently to be small and to sink in very deeply. In one specimen the *pars operculum* was very small. The central fissure the author found to correspond in almost all instances to the ordinary conditions. The central convolutions showed a tendency to excessive fissuration Very significant were the findings in the sulcus parieto-occipitalis, which in one-half of the cases extended far out on the lateral surface of the hemispheres. The cuneus, lobus paracentralis and sulcus fornicatus showed no departure from that common to the Caucasian brain. The precuneus was found to be large in every instance. The average weight of the Negro brain was found by Topinard to be 1234 grammes. Waldeyer, in his examinations, found it to be 1148 grammes.

In conclusion, the author remarks that only from an examination of a large number of specimens can any trustworthy and reliable additions be made to the anthropological problem which his remarks have opened up. J. C.

Nomenclature in the Anatomy of the Nerve Cells.—Nissl (*Neurologisches Centralblatt*, 1895, Nos. 2 and 3).

Based upon the reaction obtainable by his method of staining, Nissl proposes to speak of a "stained" (that is, visibly formed) and an "unstained" substance of the cell body of the nerve cell. For the stained substance a distinction of "intensely stained" and "slightly stained" parts ought to be made. The variety of forms under which the stained substance presents itself necessitates the introduction of names to characterize the constituents of the cells and their arrangement. N. proposes, therefore, to speak of "Körnchen," "Körnchen[1] groups," "rows," "threads," and of "corpuscles." The corpuscles are mostly intensely stained and characterized by their large size, while the other formations mentioned are much more delicate, and stain less intensely. To characterize the various forms of the corpuscles the following expressions are proposed:

1. The "nucleus-caps" (Kernkappen). These are coni of regular or irregular shape, and with an excavated basis, adapting itself to the outline of the nucleus, and upon which the nucleus-cap sits.

2. The "ramification coni" (Verzweigungskegel). These are found where a process ramifies, and they fill out the angle between the ramifications.

3. The "spindles." They are thin and long, attenuating themselves in one or both directions, sometimes ending with a thread-like formation.

---

[1] Literally granules, but the author wishes to avoid the name "granula."